CLAIMS

1. A rotary sprayer for spraying a coating product, the sprayer comprising a pneumatic turbine suitable for rotating a rotary spray member, said turbine being connected to a duct for feeding gas under pressure to drive the turbine, and being connected to at least one drive gas exhaust duct, the sprayer being characterized in that said exhaust duct includes at least two walls, a first wall (13) being situated generally inside a second wall (2) and defining the exhaust gas flow volume (V_{13}) inside said duct (12), whereas at least one space (E) of non-zero thickness (e) is provided between the outside surface (13a) of the first wall and the inside surface (12a) of the second wall.

2. A sprayer according to claim 1, characterized in that said first wall is formed by a sleeve (13) extending over substantially the entire length of said duct (12), inside the duct.

3. A sprayer according to either preceding claim, characterized in that said space (E) is insulated from the outside and filled with a quantity of gas forming a thermal insulation layer between said sleeve and the material defining said duct.

4. A sprayer according to claim 1 or claim 2, characterized in that said space (E) is fed (14; 16) with gas (F_{14}) and is connected to a gas outlet (138; 17), in such a manner that a flow of gas (F_E) can take place in said space.

5. A sprayer according to claim 4, characterized in that said space (E) is fed with gas under pressure (F_{14}) at a pressure (P_{11}) greater than the pressure (P_{12}) of the exhaust gas, and in that at least one channel (138)

connects said space to the exhaust gas flow volume (V_{13}) defined by the first wall (13).

6. A sprayer according to claim 5, characterized in that said channel (138) is formed in an upstream portion (132) of the first wall (13).

7. A sprayer according to claim 4, characterized in that said space (E) is isolated against fluid flow relative to said exhaust gas flow volume (V_{13}).

8. A sprayer according to any one of claims 4 to 7, characterized in that the gas feeding said annular space is selected from the drive gas, the gas from the bearing of the turbine (5), or the gas feeding a device for measuring the speed of rotation of the turbine.

9. A sprayer according to any preceding claim, characterized in that said first wall (13) is made of a material that is a poor conductor of heat and/or electricity, and in particular a synthetic material.

10. An installation for spraying a coating product, the installation being characterized in that it includes at least one sprayer (1) according to any preceding claim.